

**REMARKS**

The Final Office Action mailed May 5, 2006, has been received and reviewed. Claims 1-20 are currently pending in the application, of which claims 1-3 and 12-14 are currently under examination. Claims 4-11 and 15-20 are withdrawn from consideration as being drawn to a non-elected invention. Claims 1-3 and 12-14 stand rejected. Applicant has amended independent claims 1 and 15 herein, and respectfully request reconsideration of the application as amended herein.

**Supplemental Information Disclosure Statement**

Please note this **second request** that a Supplemental Information Disclosure Statement was filed herein on January 24, 2005, and that no copy of the PTO/SB/08A was returned with the outstanding Office Action. Applicant respectfully requests that the information cited on the PTO/SB/08A be made of record herein. For the sake of convenience, a second copy of the January 24, 2005, Supplemental Information Disclosure Statement, PTO/SB/08A, and USPTO date-stamped postcard are enclosed herewith. Applicant notes that the Supplemental Information Disclosure Statement is not listed on the USPTO PAIR website. However, the attached copy of the **USPTO date-stamped postcard** is evidence that it was received in the Office on January 24, 2005, even though it was evidently never matched with the file. It is respectfully requested that an initialed copy of the PTO/SB/08A evidencing consideration of the cited references be returned to the undersigned attorney.

**35 U.S.C. § 103(a) Obviousness Rejections**

**Obviousness Rejection Based on U.S. Patent No. 5,817,535 to Akram**

Claims 1 and 12-14 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Akram (U.S. Patent No. 5,817,535). Applicant respectfully traverses this rejection, as hereinafter set forth.

M.P.E.P. 706.02(j) sets forth the standard for a Section 103(a) rejection:

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the

art, to modify the reference or combine reference teachings. Second, there must be a reasonable expectation of success. Finally, **the prior art reference (or references when combined) must teach or suggest all the claim limitations.** The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). (Emphasis added).

Amended independent claim 1 recites a method for forming an interposer substrate that includes providing a substrate and forming a first and a second interconnect slot that are separated by a crosspiece that extends transversely between the slots. The first and the second slot are each configured to align respectively with a first plurality and a second plurality of bond pads on a single semiconductor die when the die is placed on the substrate.

Akram teaches a method of fabricating a Single In-line Memory Module (SIMM) in a Leads-Over-Chip (LOC) arrangement that includes a plurality of slots in a circuit board and a plurality of semiconductor dice mounted thereon. Col. 1, lines 9-14. A circuit board 12 includes a plurality of slots 20 that extend through the circuit board 12. Col. 4, lines 59-65; FIG. 1. Each slot exposes all of the bond pads of a single die such that the circuit board material does not cover the bond pads of that die. *Id.*; see FIGs. 2-3.

Akram, however, does not teach or suggest all of the claim limitations present in independent claim 1. Among others, Akram does not teach or suggest a substrate that includes a first and a second slot separated by a crosspiece that extends transversely between the slots, the first and the second slot each configured to respectively align with a first plurality and a second plurality of bond pads on a single semiconductor die. As discussed above, Akram discloses only a single slot associated with each semiconductor die in the LOC package. Therefore, because Akram does not teach or suggest all of the limitations as set forth in amended independent claim 1, the withdrawal of the 35 U.S.C. § 103(a) rejection of claim 1 is respectfully requested.

The nonobviousness of amended independent claim 1 precludes a rejection of claims 12 and 13 which depends either directly or indirectly therefrom because a dependent claim is obvious only if the independent claim from which it depends is obvious. See *In re Fine*, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988); see also MPEP § 2143.03. Therefore, the Applicant

requests that the Examiner withdraw the 35 U.S.C. § 103(a) obviousness rejection to claims 12 and 13 which depend from allowable independent claim 1.

Obviousness Rejection Based on U.S. Patent No. 5,817,535 to Akram in view of U.S. Patent No. 5,597,643 to Weber

Claim 2 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Akram in view of Weber, U.S. Patent No. 5,597,643 (hereinafter “Weber”). Applicant respectfully traverses this rejection, as hereinafter set forth.

The nonobviousness of independent claim 1 precludes a rejection of claim 2 which depends directly therefrom because a dependent claim is obvious only if the independent claim from which it depends is obvious. *See In re Fine*, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988); *see also* MPEP § 2143.03. Therefore, the Applicant requests that the Examiner withdraw the 35 U.S.C. § 103(a) obviousness rejection to claim 2 that depends directly from allowable independent claim 1.

Obviousness Rejection Based on U.S. Patent No. 5,817,535 to Akram / U.S. Patent No. 5,597,643 to Weber as applied to claims 1-2 above, and further in view of U.S. Patent No. 3,635,124 to Parsons

Claim 3 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Akram as applied to claims 1 and 2 above, and further in view of Parsons, U.S. Patent No. 3,635,124 (hereinafter “Parsons”). Applicant respectfully traverses this rejection, as hereinafter set forth.

The nonobviousness of independent claim 1 precludes a rejection of claim 3 which depends indirectly therefrom because a dependent claim is obvious only if the independent claim from which it depends is obvious. *See In re Fine*, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988); *see also* MPEP § 2143.03. Therefore, the Applicant requests that the Examiner withdraw the 35 U.S.C. § 103(a) obviousness rejection to claim 3 that depends indirectly from allowable independent claim 1.

### **CLAIM GENERICITY**

Applicant respectfully traverses the withdrawal of claims 15-20 from consideration. Six species of invention have been identified in the present application:

Species 1: Fig. 4;

Species 2: Fig. 5;

Species 3: Fig. 5A;

Species 4: Fig. 6;

Species 5: Fig. 7; and

Species 6: Fig. 9A.

Applicant considers claims 1, 12, and 13 to be generic. Although claim 15 is written in independent form, claim 1 reads upon claim 15 because claim 15 requires all of the limitations of generic claim 1. M.P.E.P. §806.04(d). Furthermore, claim 14 is generic to all species except Species 6. Applicant notes that upon allowance of a generic claim, claims either depending therefrom or otherwise requiring all of the limitations thereof would also be allowable. M.P.E.P. §806.04(d).

### **ENTRY OF AMENDMENTS**

The proposed amendments to claims 1 and 15 above should be entered by the Examiner because the amendments are supported by the as-filed specification and drawings and do not add any new matter to the application. Further, the amendments do not raise new issues or require a further search. Finally, if the Examiner determines that the amendments do not place the application in condition for allowance, entry is respectfully requested upon filing of a Notice of Appeal herein.

### **CONCLUSION**

Claims 1-20 are believed to be in condition for allowance, and an early notice thereof is respectfully solicited. Should the Examiner determine that additional issues remain which might be resolved by a telephone conference, he is respectfully invited to contact Applicant's undersigned attorney.

Serial No. 10/685,312

Respectfully submitted,

A handwritten signature in black ink, appearing to be 'CB' followed by a long, sweeping horizontal line.

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